

Remarks

Claims 1-12 were pending in the application. Claims 1-12 were rejected. No claims were merely objected to and no claims were allowed. By the foregoing amendment, claims 2, 7, and 8 are canceled, claims 1, 3, and 6 are amended, and claims 13-17 are added. No new matter is presented.

Claim Rejections-35 U.S.C. 102

Claims 1-12 were rejected as being anticipated by Naudet (US5039277). Applicant respectfully traverses the rejection.

Naudet discloses use of "a sintered carbon material, such as the commercially available VESPEL..." Col. 3, lines 27&28. Attached is a DuPont web page printout describing VESPEL as a polyimide composite. A variant of such material is described as the relevant prior art in paragraph 0003 of the present application. The final page of the attached Machine Design article indicates VESPEL as withstanding temperatures in excess of 675°F in variable stator vane bushing applications (generally consistent with the prior art 650°F figure cited in the present specification). At higher temperatures, the polyimide resin will suffer a loss of mechanical properties and surface stability resulting in failure of the bushing.

The independent claims have been amended to incorporate the electrographitic carbon material of canceled dependent claims 2 and 8. Electrographitic carbon (EGC) is typically used in electrical applications such as motor brushes and electro-discharge machining (EDM) electrodes. EGC, however, has significantly higher thermo-tolerance than the cited polyimide prior art. See, paragraph 0010 of the present application. Paragraph 0012 identifies EGC operational temperatures of 850°F and 1050°F (also, claims 4 and 5 and added dependent claims). Advantageous EGC performance data is identified in paragraph 0013. Thus there is further no suggestion for these temperatures.

Claim 6 and its new dependent claim 7 (supported by claim 3 and paragraph 0012) address self-lubricating aspects of the EGC material, not suggested by the prior art.

Accordingly, Applicant submits that claims 1, 3-6, and 9-17 are in condition for allowance. Please charge any fees or deficiency or credit any overpayment to our Deposit

Account of record.

Respectfully submitted,

By 
William B. Slate
Attorney for Applicant
Reg. No.: 37,238

Telephone: 203-777-6628
Telefax: 203-865-0297

Date: May 19 2006

Enclosures: (1) "Science of Vespel" DuPont
(2) Schmeckpeper, Mark, "Polyimide Composites Challenge Metals," Machine Design, Volume 73, Number 4, Page 64 *et seq.*, ISSN: 00249114, Published 02-22-2001

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on May 19, 2006


Antoinette Sullo